## United States Environmental Protection Agency Region 7 901 N. 5th Street Kansas City, KS 66101

Date: AUG 2 4 2009

Subject: Transmittal of Sample Analysis Results for ASR #: 4581

Project ID: BMA71700

Project Description: Herculaneum Pb Smelter site - Removal Support/Recontamination soil

sampling

From: 10 Michael F. Davis, Chief

Chemical Analysis and Response Branch, Environmental Services Division

To:

Bruce Morrison SUPR/FFSE

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the enclosed Customer Satisfaction Survey and Data Disposition/Sample Release memo for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Data Disposition/Sample Release memo.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

40325844 Superfund Summary of Project Information

08/24/2009

Project Manager: Bruce Morrison

ASR Number: 4581

Org: SUPR/FFSE

Phone: 913-551-7755

**Site ID:** A717 **Site OU:** 00

Project ID: BMA71700

Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling

Location: Herculaneum State: Missouri Program: Superfund

Site Name: HERCULANEUM LEAD SMELTER SITE - SITE

EVALUATION/DISPOSITION GPRA PRC: 302DC6C

Purpose: Site Cleanup Support

#### Explanation of Codes, Units and Qualifiers used on this report

**Sample QC Codes:** QC Codes identify the type of sample for quality control purpose.

**Units:** Specific units in which results are

reported.

\_\_ = Field Sample

% = Percent

mg/kg = Milligrams per Kilogram

**Data Qualifiers:** Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank) = Values have been reviewed and found acceptable for use.

#### **Sample Information Summary**

Project ID: BMA71700

ASR Number: 4581

**Project Desc:** Herculaneum Pb Smelter site - Removal

Support/Recontamination soil sampling

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1 -		Solid	RS-1 (HER-RS-1) = Q2		07/27/2009	14:00			08/14/2009
2 -		Solid	RS-2 (HER-RS-2) = Q4		07/27/2009	15:30			08/14/2009
3 -		Solid	RS-3 (HER-RS-3) = Q3		07/27/2009	08:30			08/14/2009
4 -		Solid	RS-4 (HER-RS-4) = Q1		07/27/2009	09:00			08/14/2009
5 -		Solid	RS-5 (HER-RS-5) = Q4		07/28/2009	09:00			08/14/2009
6 -		Solid	RS-6 (HER-RS-6) = Q3		07/28/2009	09:15			08/14/2009
1 -		Solid	RS-7 (HER-RS-7) = $Q4$		07/28/2009	10:00			08/14/2009
8 -		Solid	RS-8 (HER-RS-8) = Q4		07/28/2009	14:00			08/14/2009
9 -		Solid	RS-9 (HER-RS-9) = Q2		07/29/2009	08:00			08/14/2009
10 -		Solid	RS-10 (HER-RS-10) = Q4		07/29/2009	09:00			08/14/2009
11 -		Solid	RS-11 (HER-RS-11) = Q3		07/29/2009	10:00			08/14/2009
12 -		Solid	RS-12 (HER-RS-12) = Q2		07/29/2009	13:00			08/14/2009
13 -		Solid	RS-13 (HER-RS-13) = Q1		07/29/2009	15:00			08/14/2009
11-		Solid	RS-14 (HER-RS-14) = Q1		07/29/2009	16:00			08/14/2009
15 -		Solid	RS-15 (HER-RS-15) = Q4		07/30/2009	13:00			08/14/2009
16 -	-	Solid	RS-16 (HER-RS-16) = Q2		07/30/2009	13:00			08/14/2009
17 -		Solid	RS-17 (HER-RS-17) = Q1		07/31/2009	10:00			08/14/2009
18 -		Solid	RS-18 (HER-RS-18) = PA		07/31/2009	10:00			08/14/2009
19 -		Soild	RS-19 (HER-RS-19) = Q3		07/31/2009	12:00			08/14/2009
20		Solid	RS-20 (HER-RS-20) $\approx$ Q3		07/31/2009	14:00			08/14/2009

#### **RLAB Approved Analysis Comments**

08/24/2009

Project ID: BMA71700

**Project Desc** Herculaneum Pb Smelter site - Removal

Support/Recontamination soil sampling

#### **Analysis** Comments About Results For This Analysis

1 Metals in Solids by ICP

Lab: Region 7 ESAT Contract Lab (In-House)
Method: EPA Region 7 RLAB Method 3122.3C

Basis: Dry

 Samples:
 1-\_\_\_
 2-\_\_\_
 3-\_\_\_
 4-\_\_\_
 5-\_\_\_
 6-\_\_\_
 7-\_\_\_

 8-\_\_\_
 9-\_\_
 10-\_\_\_
 11-\_\_\_
 12-\_\_\_
 13-\_\_\_
 14-\_\_\_

15-\_\_ 16-\_\_ 17-\_\_ 18-\_\_ 19-\_\_ 20-\_\_

Comments:

1 Percent Solid

Lab: Region 7 ESAT Contract Lab (In-House)
Method: EPA Region 7 RLAB Method 3142.9E

Basis: N/A

 Samples:
 1-\_\_\_\_
 2-\_\_\_\_
 3-\_\_\_\_
 4-\_\_\_\_
 5-\_\_\_\_
 6-\_\_\_\_
 7-\_\_\_

 8-\_\_\_
 9-\_\_\_
 10-\_\_\_
 11-\_\_\_
 12-\_\_\_
 13-\_\_\_
 14-\_\_\_

15-\_\_ 16-\_\_ 17-\_\_ 18-\_\_ 19-\_\_ 20-\_\_

Comments:

(N/A)

## RLAB Approvéd Sample Analysis Results

08/24/2009

Project ID: BMA71700

**Project Desc:** Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling

	Support/ Net	ı ıg			
Analysis/ Analyte	Units	1	2	3	4
1 Metals in Solids by ICP	mg/kg	469	198	374	188
1 Percent Solid					
Solids, percent	%	82.9	88.0	80.4	86.4

#### **RLAB Approvéd Sample Analysis Results**

08/24/2009

Project ID: BMA71700

Project Desc: Herculaneum Pb Smelter site - Removal Support/Recontamination soil sampling

Analysis/ Analyte	Units	5	6	7	8
1 Metals in Solids by ICP Lead	mg/kg	169	184	63.2	55.7

**RLAB Approved Sample Analysis Results** 

08/24/2009

Project ID: BMA71700

Project Desc: Herculaneum Pb Smelter site - Removal

Analysis/	Analyte

Solids, percent

Support/Recontamination soil sampling

1	Metals in	Solids	by	ICP
	Lead			
1	Percent S	Solid		

Units	9	10	11	12
mg/kg	532	281	166	336
%	95.2	96.7	93.6	80.9

#### **RLAB Approved Sample Analysis Results**

08/24/2009

Project ID: BMA71700

**Project Desc:** Herculaneum Pb Smelter site - Removal

Support/Recontamination soil sampling

Analysis/ Analyte									
1	Metals in Solids by ICP								

1 Percent Solid Solids, percent

Metals in	Solids	bу	ICP
Lead			

Units	13	14	1516		
mg/kg	107	93.5	139	436	
%	90.9	85.1	97.4	93.4	

#### **RLAB Approved Sample Analysis Results**

08/24/2009

Project ID: BMA71700

**Project Desc:** Herculaneum Pb Smelter site - Removal

Support/Recontamination soil sampling

Analysis/ Analyte	Units	17	18	19	20
1 Metals in Solids by ICP	mg/kg	165	229	261	1460
1 Percent Solid Solids, percent	%	76.1	77.4	80.4	77.8

# CHAIN OF CUSTODY RECORD ENVIRONMENTAL PROTECTION AGENCY REGION VII

ASTIVITY LEADER(Print) DVULE MANSIN				OF SURVEY	SURVEY OR ACTIVITY						DATE OF COLLECTION	SHEE	
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DESCRIPTION OF SI	HIPMENT			٨	NODE OF SHI	PMI	ENT						
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SAMPLER CONVEYED (SHIPPING DOCUMENT NUMBER)													
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ASR Number: 4	581 Sample Number	er: 1 QC Co	ode: Matı	ix: Solid Tag	<b>ID:</b> 4581-1
Project ID: Project Desc:	BMA71700 Herculaneum Pb Smelte		roject Manager I Support/Recont		
City:	Herculaneum		State	: Missouri	
Program:	Superfund				
	HERCULANEUM LEAD S		SITE	Site ID: A71	7 <b>Site OU:</b> 00
	EVALUATION/DISPOSIT	ION			
Location Desc:	HER-RS-1	· · · · · · · · · · · · · · · · · · ·		<del></del> -	
		External San	ple Number:	RS-1	
Expected Conc:	(or Circle On	e: Low Mediur	n High)	Date	Time(24 hr)
Latitude:		Sample Co	llection: Start:	72709	1 <u>4.∞</u>
Longitude:			End:	//	_:_
Laboratory Ana	lyses:	· ··	· · · · · · · · · · · · · · · · · · ·		
Container	Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 Days		is by ICP	
0 -	4 Deg C	0 Days	1 Percent Solid		
Sample Comme	nts:	2.0	1 1		
(N/A)	(Y2	309 p	pm lead		
		Niton	pm lead 1544		

ASR Number:	4581 Sample N	umber: 2	QC Co	de: Matr	ix: Solid	<b>Tag ID:</b> 4581-2
Project Desc:	BMA71700 Herculaneum Pb S Herculaneum	melter site - F		• •		
Program:			SITE - SI			A717 <b>Site OU:</b> 00
Location Desc:	HEK-RS		al Same	ole Number: _	P(-2	
Expected Conc	: (or Circ	le One: Low	Medium	High)	Date	Time(24 hr) 15.30
Latitude: Longitude:		Sam	ple Coll	ection: Start: End:	7,27,69 	<u> </u>
Laboratory An	alyses: Preservative	Holdin	ng Time	Analysis		
1 - 8 oz glass 0 -	4 Deg C 4 Deg C	180 0		1 Metals in Solid 1 Percent Solid	s by ICP	
Sample Commo (N/A)	ents:	Q4 1	150	1 ppm lead 1544		

ASR Number:	4581 <b>Sample N</b>	umber: 3	QC Code: _	Matrix: Solid	<b>Tag ID:</b> 4581-3
_	Herculaneum Pb 9	Smelter site - Re	_	Manager: Bruce Mont/Recontamination State: Missouri	
Program:	Herculaneum Superfund HERCULANEUM LE EVALUATION/DIS		ITE - SITE		A717 <b>Site OU:</b> 00
Location Desc:	HER-RS		ni Sample Nu	Imber: HCR R	<u>5-3</u>
Expected Conc	e (or Circ	cle One: Low I	<del>-</del>	•	Time(24 hr)
Latitude: Longitude:		Samp	ole Collection	n: Start: 7 <u>270</u> End://_	
Laboratory An	aiyses:	Holding	ı Time Ana	alvels	
1 - 8 oz glass 0 -	4 Deg C 4 Deg C	180 0	Days 1 Me	etals in Solids by ICP reent Solid	
Sample Commo (N/A)	ents:	Q3	290	1 ppm lead	
			Num 15c	1 ppm lead 14	

ASR Number: 4!	581 <b>Sampie Numbe</b>	r: 4 QC C	code: Mat	rix: Solid T	<b>ag ID:</b> 4581-4
_	lerculaneum Pb Smelte Ierculaneum				
Site Name: +	IERCULANEUM LEAD SI VALUATION/DISPOSIT		SITE	Site ID: A	717 <b>Site OU:</b> 00
Location Desc:	HER-RS-	4			
	•	External Sar	mple Number:	HERERS	<u>- 4</u>
Expected Conc:	(or Circle One	e: Low Mediu	• •	Date	Time(24 hr)
Latitude:		Sample Co	ollection: Start:	72709	OJ <u>:∞</u>
Longitude:			End:	_/_/_	_:_
Laboratory Ana Container	lyses: Preservative	Holding Time	Analysis	· · <del>- ·</del> · ·	
1 - 8 oz glass	4 Deg C	180 Days		ds by ICP	
0 -	4 Deg C	0 Days	1 Percent Solid		
Sample Commer	its:	10			
(N/A)	QI	120	ppm lead		
		Niton	ppm Lead 1544		

ASR Number:	4581 Sample Num	ber: 5 QC C	ode: Mat	rix: Solid	Tag ID: 4581-5
Project ID: Project Desc:	BMA71700 Herculaneum Pb Smo		roject Manager		
City:	Herculaneum		State	: Missouri	
Program:	Superfund				
Site Name:	HERCULANEUM LEAD EVALUATION/DISPOS		SITE	Site ID:	A717 <b>Site OU:</b> 00
Location Desc:	HER-RS-	5		- Art	
		External San	nple Number:	HERE R	S-5
<b>Expected Conc</b>	: (or Circle	One: Low Mediu		Date	Time(24 hr)
Latitude:		Sample Co	llection: Start:	1280	1 0 <u>1 10</u>
Longitude:			End:		_: <u>_</u>
Laboratory An	alyses:				
Container	Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 ; Days		ds by ICP	
0 -	4 Deg C	0 Days	1 Percent Solid		
Sample Commo	ents:	0.11 12		1	· · · · · · · · · · · · · · · · · · ·
(N/A)		Q4 13	o ppm le	rd	
		Nitm	1544		

ASR Number: 4581	Sample Numb	er: 6	QC Co	de: Mat	rix: Solid	Tag :	ID: 4581-6
Project ID: BMA Project Desc: Hero	ulaneum Pb Smel	ter site - R		• • •	tamination		mpling
City: Herc				State	: Missouri		
Program: Supe Site Name: HERG EVAL			ITE - SI	TE	Site ID:	A717	Site OU: 00
Location Desc:	HOR-K	5-6			() (24 )		DC 1
		Externa	al Samp	le Number:	H122-1	por	13-6
Expected Conc:	(or Circle O	ne: Low	Medium	High)	Date	. a	Time(24 hr)
Latitude:	<del></del>	Sam	ple Coli	ection: Start:	7,28,0	) <b>7</b>	<u> 91:15</u>
Longitude:	<del></del>			End:		_	<b>_:</b> _
Laboratory Analyse	es:				· · · · · · · · · · · · · · · · · · ·	·····	
Container	Preservative	Holding	g Time	Analysis			
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Soli	ds by ICP		
0 -	4 Deg C	0	Days	1 Percent Solid			
Sample Comments:		<b>~</b>	1.1		6		
(N/A)		Q3	14	b frm lead	X.		
			Ni	io prn lead in 1544			

ASR Number: 458	31 Sample Numb	er: 7	QC Cod	ie: Matr	ix: Solid T	<b>ag ID:</b> 4581-7
Project ID: BM				ject Manager:		
<del>-</del>	erculaneum Pb Smelt	er site - Ro	emovai s	• •		il sampling
Program: Su	erculaneum			State:	Missouri	
Site Name: HE	RCULANEUM LEAD S ALUATION/DISPOSI		ITE - SI	TE	Site ID: A7	17 <b>Site OU:</b> 00
Location Desc: _	HER-R	5-7				
•		Externa	al Samp	le Number: _	RS-7	
Expected Conc:	(or Circle O	ne: Low	Medium	High)	Date	Time(24 hr)
Latitude: _		Samı	ple Coll	ection: Start:	728,09	( <u>o óo</u>
Longitude: _				End:		_:_
Laboratory Analy						
Container	Preservative	Holding	<b>Time</b> Days	Analysis  1 Metals in Solid	- by ICD	
1 - 8 oz glass 0 -	4 Deg C 4 Deg C	0	Days	1 Percent Solid	S Dy ICP	
Sample Comment	 S:	<u> </u>	16	. ( 1		
(N/A)		44	49 p	ipm lead		
		N	iton 15	ipm lead		

ASR Number: 45	81 <b>Sample Nu</b> n	nber: 8 Q	C Code:	Matrix: Solid	<b>Tag ID:</b> 4581-8
<del>-</del>	erculaneum Pb Sm erculaneum	elter site - Rem	oval Support/R	ager: Bruce Morr econtamination s state: Missouri	
Site Name: H	ERCULANEUM LEAI VALUATION/DISPO		E - SITE	Site ID: A	717 <b>Site OU:</b> 00
Location Desc:	HER-K	<u>25-8</u>		VCO	
		External S	Sample Numb	er: <u>\\</u>	
Expected Conc:	(or Circle	One: Low Me	dium High)	Date	Time(24 hr)
Latitude:		Sample	Collection: S	tart: <u>[]28</u> 99	<u>14.∞</u>
Longitude:			1	End://_	_:_
Laboratory Anai	yses: Preservative	Holding Ti	me Analysis		
1 - 8 oz giass	4 Deg C	180 C	ays 1 Metals i	n Solids by ICP	
0 -	4 Deg C	0 0	Pays 1 Percent	Solid	
Sample Commen (N/A)	ts:	Q4 L	15ppm lea	d	

Noton 1544

ASR Number: 458	S1 Sample Number:	9 <b>QC Co</b>	de: Matı	ix: Solid Tag	<b>ID:</b> 4581-9
=	rculaneum Pb Smelter		• •	amination soil s	
<b>-</b>	rculaneum		State	Missouri	
	perfund RCULANEUM LEAD SMI ALUATION/DISPOSITIO		ITE	Site ID: A717	Site OU: 00
Location Desc: _	HER-R	5-9 External Sam	nia Number	RS-9	
		EXCERNAI Sam	pie Number: _	105 1	
<b>Expected Conc:</b>	(or Circle One:	Low Medium	n High)	Date	Time(24 hr)
Latitude: _		Sample Col	lection: Start:	7,29,09	$ \sqrt{8} \overline{\omega} $
Longitude: _	<del></del>		End:	_/_/_	_:_
Laboratory Analy	'Ses: Preservative	Holding Time	Analysis		
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	ls by ICP	
0 -	4 Deg C	0 Days	1 Percent Solid		
Sample Comment	s: () )		1110 000 1	1	
(N/A)	WA		790 ppr-1	lav	
		No	140 ppm ( .tm 1544		

ASR Number: 4	581 Sample Num	<b>ber:</b> 10	QC Co	de: Mat	rix: Solid	Tag :	<b>ID:</b> 4581-10
=	BMA71700 Herculaneum Pb Sme Herculaneum	lter site - R		• •			mpling
	Superfund HERCULANEUM LEAD EVALUATION/DISPOS		SITE - SI	TE	Site ID:	A717	Site OU: 00
Location Desc:	HER-R		al Samp	ole Number:	HER	tup 1	25-10
Expected Conc:	(or Circle C				Date	~a	Time(24 hr)
Latitude: Longitude:		Sam	pie Coli	ection: Start: End:			—:— Qi'∞
Laboratory Ana	llyses: Preservative	Holdin	g Time	Analysis			
1 - 8 oz glass 0 -	4 Deg C 4 Deg C	180 0	Days Days	1 Metals in Solid 1 Percent Solid	•		
Sample Comme	nts:	Q4	کر	to prome	ead		
			Nita	1544			

ASR Number: 4	581 <b>Sample Num</b>	ber: 11 (	QC Code	: Matr	ix: Solid Ta	ag ID: 4581-11
_	Herculaneum Pb Sme	elter site - Rer	_	• •	amination soi	
City:	Herculaneum			State:	Missouri	
_	Superfund					
	HERCULANEUM LEAD EVALUATION/DISPOS	· -	re - site	·	Site ID: A7	17 <b>Site OU:</b> 00
Location Desc:	HER-R	5-11				
	•	External	Sample	Number: _	KS-11	
<b>Expected Conc:</b>	(or Circle	One: Low M	edium H	ligh)	Date	Time(24 hr)
Latitude:		Sampi	e Collec	tion: Start:	729.09	( <u>o &amp;</u>
Longitude:				End:	_/_/_	_:_
Laboratory Ana	lyses:	· · · · · ·		·····		<del></del>
Container	Preservative	Holding <sup>-</sup>		Analysis		
1 - 8 oz glass	4 Deg C	180	•	1 Metals in Solid	s by ICP	
0 -	4 Deg C	0	Days	1 Percent Solid		
Sample Comme	nts:	50		125000	Load	
(N/A)	(	J3		147 Pr	cen	
, , ,		· ( -	Nito	125 ppm n1544		
			1 4 4/.	- , , ,		

ASR Number:	4581 Sample Number	er: 12 QC C	ode: Mat	rix: Solid Tag	ID: 4581-12
Project ID:			roject Manager		
Project Desc:	Herculaneum Pb Smelte	er site - Remova	• • •		sampling
•	Herculaneum		State	: Missouri	
Program:	•				
Site Name:	HERCULANEUM LEAD S EVALUATION/DISPOSIT		SITE	Site ID: A71	7 <b>Site OU:</b> 00
Location Desc:	HER-R	5-12			
		External Sar	mple Number:	RS-12	
<b>Expected Conc</b>	: (or Circle On	e: Low Mediu	m High)	Date	Time(24 hr)
Latitude:	<del></del>	Sample Co	ollection: Start:	72909	13.00
Longitude:			End:		_:_
Laboratory Ar	nalyses:				
Container	<b>Preservative</b>	Holding Time	•		
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solid	ds by ICP	
0 -	4 Deg C	0 Days	1 Percent Solid		
Sample Comme	ents:		00 100		<del></del>
(N/A)	Qa	20	ppm lead		
		Niton	. ppm lead 1544		

ASR Number: 458	1 Sample Number	er: 13 <b>Q</b> (	C Code: N	<b>fatrix:</b> Solid	Tag ID: 4581-13
Project ID: BM			Project Mana	=	
·-	rculaneum Pb Smelte	er site - Remo			soil sampling
<b>City:</b> He	rculaneum		St	ate: Missouri	
_	perfund				
	RCULANEUM LEAD S ALUATION/DISPOSIT		- SITE	Site ID:	A717 <b>Site OU:</b> 00
Location Desc:	HER-R	5-13			
		External S	ample Numbe	r: KS-13	
Expected Conc:	(or Circle On	e: Low Med	dium High)	Date	Time(24 hr)
Latitude:		Sample	Collection: Sta	ort: 799	<u>59</u> 1 <u>5.∞</u>
Longitude:	<del></del>		E	nd://_	:
Laboratory Analy					
Container	Preservative	Holding Ti	-		
1 - 8 oz glass	4 Deg C		•	Solids by ICP	
0 -	4 Deg C	0 D	ays 1 Percent S	olid	
Sample Comments	S:	01		<del></del>	
(N/A)	QI	86	ppm lead 1544		
		Niton	1544		

ASR Number: 4	581 <b>Sample Numbe</b>	r: 14	QC Code:	Mat	rix: Solid	<b>Fag ID:</b> 4581-14
Project ID:			_	_	: Bruce Morr	
	Herculaneum Pb Smelte	r site - R	temoval Su			oil sampling
City: 1 Program: 9	Herculaneum			State	: Missouri	
Site Name:	HERCULANEUM LEAD SI EVALUATION/DISPOSIT		SITE - SITE		Site ID: A	717 <b>Site OU:</b> 00
Location Desc:	HER-R	5-14				
	-	Extern	al Sample	Number:	RS-14	ł
<b>Expected Conc:</b>	(or Circle One				Date	Time(24 hr)
Latitude:		Sam	ple Collect	ion: Start:	7_29.09	<u>6∞</u>
Longitude:	<u> </u>			End:		_:_
Laboratory Ana	•					···
Container	Preservative	Holdin 180	~	<b>Analysis</b> Metals in Soli	do by ICD	
1 - 8 oz glass 0 -	4 Deg C 4 Deg C	0	Days 1	Percent Solid		
Sample Comme	nts:		10.4	[.	. 1	
(N/A)	Ql		62 N	m le	ap	
		N	ifun 15c	om le 14		

ASR Number:	4581	Sample	Number:	15	QC Co	de: Mat	rix: Solid	Tag 1	( <b>D:</b> 4581-15	
City:	Hercula Hercula	erculaneum Pb Smelter site - Removal Support/Recontamination soil sampling erculaneum State: Missouri								
Program: Site Name:	HERCU	LANEUM	LEAD SME ISPOSITIO		SITE - SI	TE	Site ID:	A717	Site OU: 00	
Location Desc:		HER	-RS-19		al Sam <sub>l</sub>	ole Number:	RS-15			
<b>Expected Conc</b>		(or C	ircle One:				7 <b>Date</b>	a	Time(24 hr)	
Latitude: Longitude:				Sam	pie Coli	ection: Start: End:	<u>-/_/_</u>	<u>_</u> t -	_: <u>~</u>	
Laboratory An	-	: reservativ	8	Holdin	g Time	Analysis				
1 - 8 oz glass 0 -		Deg C Deg C		180 0	Days Days	1 Metals in Solid 1 Percent Solid	ds by ICP			
Sample Commo	ents:			,		110 44	( . d			
(N/A)			(	24		118 ppm	lean			
					Nito	118 ppm n 1544				

ASR Number:	4581 <b>Sampl</b> e	e Number:	16	QC Co	de: Mati	rix: Solid	Tag I	<b>D:</b> 4581-16
Project ID: Project Desc: City:		Pb Smelter	site - Re					mpling
Program: Site Name:	Superfund HERCULANEUN EVALUATION/I			ITE - SI	TE	Site ID:	A717	Site OU: 00
Location Desc:		HER-1	,,,			P.S-10		
Expected Conc Latitude: Longitude:		Circle One:	Low	Medium	ole Number:  High)  ection: Start: End:	Date 1,390		Time(24 hr)  3.∞ _:_
Laboratory An	alyses:	ve	Holding	ı Time	Analysis			
1 - 8 oz glass 0 -	4 Deg C 4 Deg C		180	Days Days	1 Metals in Solid 1 Percent Solid	ds by ICP		
Sample Commo (N/A)	ents:	Qa	1	3 Jiton	20 ppm 1	lead		

ASR Number:	4581	Sample	Number:	17	QC Co	de: Ma	trix: Solid	Tag 1	ID: 4581-17
Project ID: Project Desc:			h Smelter e	ito - D		oject Manage			molina
		laneum r	D Silicitor s	niće - K	CITIOVAI		e: Missouri	3011 30	mpinig
Program:									
Site Name:			I LEAD SME DISPOSITIO		SITE - S	ITE	Site ID:	A717	Site OU: 00
Location Desc:	l		UL-RS-	17					
		•	E	xtern	al Sam	ple Number:	RS17		
Expected Conc	::	(or (	Circle One:	Low	Medium	n High)	Date		Time(24 hr)
Latitude:				Sam	ple Col	lection: Start	:: 7,3(ps	ĺ	( <u>o ˈæ</u>
Longitude:						End	l: _/_/_	_	_:_
Laboratory Ar	-				•••				
Container		Preservativ	ve .		g Time	Analysis			
1 - 8 oz glass		Deg C		180		1 Metals in So	•		
0 -	4	Deg C		0	Days	1 Percent Soli	<u> </u>		
Sample Comm	ents:		6	,		115 00 1			
(N/A)	•		Q	(		110 ppm	ead		
					Nito	110 ppm l n 1544			

ASR Number:	4581 <b>Sample</b>	Number: 18	QC Co	de: Matı	ix: Solid	<b>Tag ID:</b> 4581-18
Project ID: Project Desc: City: Program:	Herculaneum P Herculaneum	b Smelter site		• •		
_	HERCULANEUM EVALUATION/D		ER SITE - SI	TE	Site ID:	A717 <b>Site OU:</b> 00
Location Desc:	H	DR-RS-18			. 4	
		Ext	ernal Sam <sub>l</sub>	ole Number:	RS-18	<b>&gt;</b>
<b>Expected Conc</b>	: (or (	Circle One: L	ow Medium	High)	Date	Time(24 hr)
Latitude:		S	ample Coll	ection: Start:	7,31,00	<u>1 (ο ί∞</u>
Longitude:				End:		_:
Laboratory An	alyses: Preservativ	re Ho	olding Time	Analysis		
1 - 8 oz glass	4 Deg C		180 Days	1 Metals in Solid	ls by ICP	
0 -	4 Deg C		0 Days	1 Percent Solid		
Sample Commo (N/A)	ents:	P.A.		39 ppm	lead	
			Vitor	39 ppm		

ASR Number:	4581 <b>Sample Num</b>	iber: 19 QC	Code: Mai	t <b>rix:</b> Solid <b>Ta</b> ç	<b>ID:</b> 4581-19
	Herculaneum Pb Smo Herculaneum		= =		
	HERCULANEUM LEAD EVALUATION/DISPO		- SITE	Site ID: A71	7 <b>Site OU:</b> 00
Location Desc:	HER-R		ample Number:	RS-19	
<b>Expected Conc</b>	(or Circle	One: Low Medi	um High)	Date	Time(24 hr)
Latitude:		Sample (	Collection: Start	<u> 1369</u>	<u>[≥.∞</u>
Longitude:			End	:	_:_
Laboratory An	-				··· · · · · · · · · · · · · · · · · ·
Container	Preservative	Holding Tim	•	ide by ICD	
1 - 8 oz glass 0 -	4 Deg C 4 Deg C	180 Day 0 Day		•	
Sample Commo	ents:				
(N/A)	Q3	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	46 ppm 6 n 1544	ad	
		Nito	n 1544		

ASR Number: 4	581 <b>Sample N</b>	umber: 20	QC Code	e: Matri	x: Solid	<b>Tag ID:</b> 4581-20
=	Herculaneum Pb S Herculaneum	Smelter site - Re	_	• •		
Site Name:	HERCULANEUM LE EVALUATION/DIS		ITE - SIT	E	Site ID: A	717 <b>Site OU:</b> 00
Location Desc:	HER-R	1-20				
		Externa	al Sampl	e Number: _	125-20	· · · · · · · · · · · · · · · · · · ·
Expected Conc:	(or Circ	de One: Low	Medium	High)	Date	Time(24 hr)
Latitude:		Samı	ole Colle	ction: Start:	1,34,09	1 <u>4 .</u> ∞
Longitude:				End:	_/_/_	_:_
Laboratory Ana	alyses: Preservative	Holding	) Time	Analysis		· · · · · · · · · · · · · · · · · · ·
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids	s by ICP	
0 -	4 Deg C	0	Days	1 Percent Solid		
Sample Comme	nts:	00	6	<u></u>	1. 1	•
(N/A)		Q3	8	Sippin	lead	
		N	itun 19	57 ppm 544		